

PIG

PIG A GAME FOR 2 PLAYERS



The first to get 100 wins.
Throw 2 dice, add your scores and stop any time.



Double 1 takes your total score back to zero.



One 1 ends your turn and you add zero.

PLAY

Both players start with zero points and take turns to throw the dice as many times as they like adding the total at each throw to their score.

LEARN AND WIN

You throw a double one. On the next throw, is your chance of throwing a double one the same, more likely or less likely?

On each throw, which of the following 3 options is most likely and which is least likely? How do you know?

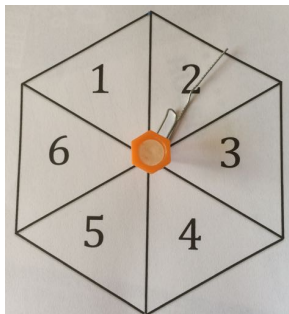
- (A) 1 and some other number
- (B) A double 1
- (C) Two numbers other than 1.

Can you work out a strategy so that you can win more often than you lose?

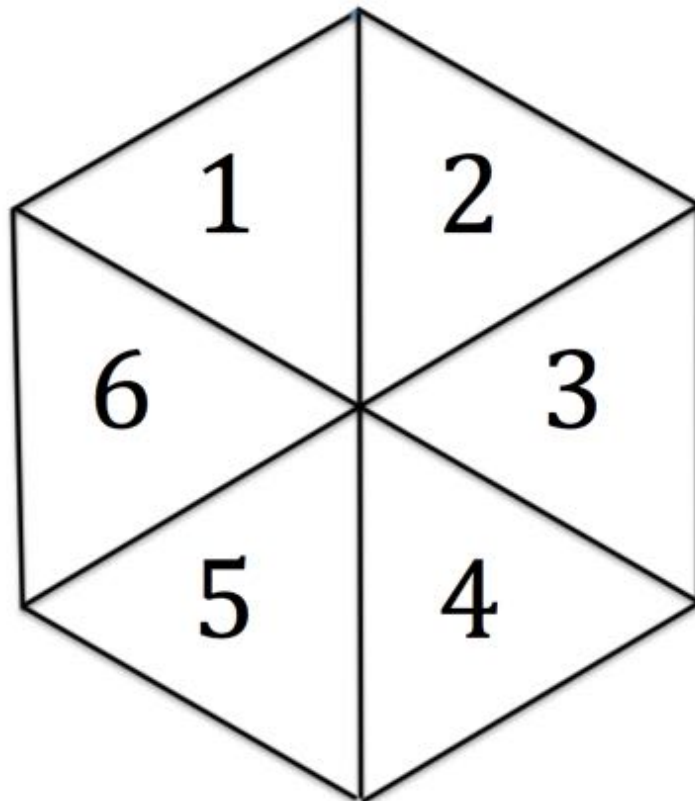
HELP

MAKE YOUR OWN SPINNERS

You will need a pair of dice or a spinner for each pair of learners.



To make your own spinner as shown in the picture you will need a paper clip and a pin. Straighten out one end of the paper clip, cut out the template and then pin the paper clip and the hexagon on a flat surface so that the spinner spins freely. Now you are ready to play the game.



NEXT

The game described on page 1 is sometimes called Piggy Ones and there is a Piggy Sixes version of the game. Would it make much difference to the game if the number 1 was the same as the numbers 2, 3, 4 and 5 and instead, throwing a double six would take the score down to zero and throwing a six and another number would end the turn without adding anything to the total score?

Throw two dice 50 times and record the results. What percentage of the throws gave a double one, what percentage one and another number, and what percentage two numbers other than one?

Compare your experimental probability with the theoretical probabilities of 28% for one and another number, 3% for a double one and 69% for two numbers neither of which is a one.

Why are these two sorts of probability different?